Result Page

The present invention relates to a fireproof soap changing liquid disinfectant of color a certain duration of washing of the hands
The washing of the hands of personal the hospital front an invasive medical gesture is traditionally carried out without guarantee of duration and thus ssns guaranteed antisepsy. Indeed if the duration of the washing of the hands is insufficient, it EP C to exist a risk of transmission of infectious disease by the hands of personal looking after
The present invention makes it possible to cure this contamination. A soap changing liquid disinfectant of color during the washing of the hands of personal looking after after a certain duration of washing makes it possible to obtain the guarantee of the antisepsy (one to 2 minutes of contact of the soap with the hands, according to the authors)
Several technical can induce this variation of color of a liquid soap disinfectant (å base of Chlorexidîne for example).

* Variation of the PH: In the same container that the soap disinfectant, one can associate an indicator which has a zone of turn compatible with the PH of the soap (between 5,5 and 7). One 2nd container can contain sodium bicarbonate which can when it is blended with the soap and the indicator to vary more the pH and thus to intensify the variation of color.

One can quote for example like indicator:
- the red one of Phenol (C19H1405, S)
- the red one of bromophenol (Cl9Hl lNaOS, S)
- the blue one of bromothymol (C27H18Br205)
- universal indicator.

Dye varying from yellow with red A for the two first of an Acid pH to a Basic pH, and varying the yellow one with blue for the two last ones in the same way of an Acid pH to a I1 Basic pH exists other usable indicators
* A dye and reactive modifying the colour of this odorant For the this technical dye would be integrated with the soap disinfectant and the reactive one would be in one 2nd container the mixture allows a progressive discolouration of the soap.

One can quote for example like dye:
- The blue one licenses V, E 131, Ci 42051, with like reactive the ascorbic acid C 6 H808 in solution with approximately 1 grammeilitre inducing a variation of color of blue to green emerald.

- The red 22, Cl 45350, C20H605Na2BR4, with like reactive 1, a solution â 5% of sulphate of iron FeS04 inducing a variation of color of red fluorescent to the black one; or like reactive 2, a solution at alum 5% of potash K08S2A16H20 inducing a variation of color of red fluorescent to the yellow one.

- Lejaune N 7, Ci 10316, C20H1205, with as reactive a solution at sulphate 5% of iron FeSO4 inducing a variation of color of yellow fluorescent to the black one.

- Indigotin or blue N2, E132, Ci 73015, C16H8N208S2Na2, with as reactive a solution at sodium bicarbonate 10%, inducing a total discolouration of blue initial.

- Green N 3, with as reactive a solution at iron FeS04 sulphate 5%, inducing a variation of color of green to the black one.

- Green the n08, CI59040, with as reactive a solution at iron FeS04 sulphate 5%, inducing a variation of corridor of green to the black one.

I exists other dyes.

* mierosahères: In this technical, the soap disinfectant (DIN PH with approximately of 5,5) contains tiny spheres containing themselves a dye These microspheres are coated dune strips which perméabilise during the variations of PH (for example: great 6) and allows to release the dye in the soap (cf diagram joint: description dune microsphere)
For example: I' acetylphtalate of cellulose can be proposed like coating; ins there exists of cave produced which can compose coating.

H will be then possible to introduce and propose large a nornbre inclusive watersoluble dyes in these microspheres for example: the yellow CI45350, red C114700, the red CI16255, the purple CI60730, the blue CI42045 the blue CI42051, green C161570, orange CI15985 etc

* Two compose forming a dye nar contact: Two intermediate reactional would form during the washing of the hands a third product which would be coloured.

Numerous pigments can be used.

* liDosomes: Dyes can be introduced into micro formed capsules by micelles of lipids which are

the liposomes.

Complementary studies must make it possible to determine the concentrations of the dyes or indicators for these various technical or the thickness of the layer of coating for the technical one of the microsphêres or the reactions chemical in the technical one of the blended compounds.

It will be noted that: * The washing of the hands of personal looking after will be carried out without change of the practices.

* According to technical Ci above suggested and according to whether there is one or two containers (one will mix the contents of the two containers then), the physician or the nurse will wash the hands and will after observe 1 to 2 minutes of contact of the soap with the hands (dependent of the concentrations of the selected dyes), a variation of color of the soap disinfectant used.

* The personal one looking after will be authorized to stop the washing of its hands only when the variation of color is obtained. what means one determined duration of washing and what guaranteed quality of the antisepsy.

The present invention is particularly intended to check the duration of washing of the hands of personal looking after front a medical invasive gesture. change of color of the soap allowing to ensure itself of the respect of this duration of washing and then guaranteeing the antisepsy obtained.

Result Page

CLAIMS

1. Liquid soap disinfectant characterized in that it contains a mean (indicating or dye) allowing the change of color after a determined duration of washing of the hands
2. Soap disinfectant, according to claim 1, characterized in that the mean is an indicator, which, added with the soap, causes the change of color to the variation of PH
3. Soap disinfectant, according to claim 1, characterized in that the mean is colouring which, added with the soap, causes the change of color thanks to reactive resulting from one 2nd container
4. Soap disinfectant according to claim 1, characterized in that the mean east constitutes of microspheres containing themselves a dye which will be dispersed in the soap thanks to the permeabilisation of coating obtained by variation of the PH